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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                   | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------------------------|------------------|
| 09/576,727      | 05/23/2000  | Chad A. Cobbley      | 3639.1US (97-1383.1)                  | 3108             |
| 7590 10/14/2005 |             | EXAMINER             |                                       |                  |
| James R. Duzan  |             | TRINH, MINH N        |                                       |                  |
| Trask Britt     |             |                      | · · · · · · · · · · · · · · · · · · · |                  |
| P O Box 2550    | •           |                      | ART UNIT                              | PAPER NUMBER     |
| Salt Lake City, | UT 84110    |                      | 3729                                  |                  |

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| •   |  |   |  |   |                |  |
|---|--|---|--|---|----------------|--|
|   |  | Applica   | ation No.  | Applicant(s)  |                |  |
| Office Action Summary   |  |   | 3,727  | COBBLEY ET AL   | COBBLEY ET AL. |  |
|   |  |   | ner  | Art Unit  |                |  |
|   |  | Minh Ti   |  | 3729  |                |  |
| The MA<br>Period for Reply  | AILING DATE of this commu  | nication appears on   | the cover sheet w  | ith the correspondence ac   | idress         |  |
| WHICHEVER - Extensions of time after SIX (6) MOI - If NO period for ries after to reply we have reply received. | ED STATUTORY PERIOD IN IS LONGER, FROM THE IN IS LONGER, FROM THE IN IS LONGER, FROM THE IN IT IS THE INTERIOR THE INTERIOR THE INTERIOR THE INTERIOR THE IS A STATE OF THE IS | MAILING DATE OF is of 37 CFR 1.136(a). In no imunication. statutory period will apply an ly will, by statute, cause the | THIS COMMUNI event, however, may a d will expire SIX (6) MOI application to become A | CATION. reply be timely filed  NTHS from the mailing date of this c BANDONED (35 U.S.C. § 133). |                |  |
| Status  |  |   |  |   |                |  |
| 1)☐ Respon  | sive to communication(s) fil   | led on  |  |   |                |  |
| 2a)⊠ This act   |  | 2b)☐ This action is   | s non-final.   |   |                |  |
|   | nis application is in condition in accordance with the prac  |   | •  | · •   | e merits is    |  |
| Disposition of Cl   | aims   |   |  |   |                |  |
| 4a) Of th<br>5) ☐ Claim(s<br>6) ☑ Claim(s<br>7) ☐ Claim(s   | ) <u>1-3,5,6,8,18-20,22,23 and</u> ne above claim(s) is/s ) is/are allowed. ) <u>1-3,5,6,8,18-20,22,23 and</u> ) is/are objected to. ) are subject to restri   | are withdrawn from 125 is/are rejected.   | consideration.   |   |                |  |
| Application Pape  | ers  |   |  |   |                |  |
| 9)□ The spe   | cification is objected to by t   | he Examiner.  |  |   |                |  |
| -   | ving(s) filed on is/are  | •   |  | •   |                |  |
| , ,   | t may not request that any obj   |   | •  |   |                |  |
|   | ment drawing sheet(s) includin<br>n or declaration is objected t   | •   | -  | • • • •   | •              |  |
| Priority under 35   | U.S.C. § 119   |   |  |   |                |  |
| a)  | edgment is made of a claim of Some * c) None of: ertified copies of the priority opies of the copies of the priority opies of the certified copies oplication from the Internation attached detailed Office actions.   | y documents have by documents have be of the priority docu  | een received.<br>een received in A<br>ments have beer<br>Rule 17.2(a)).              | Application No n received in this National  | Stage          |  |
| Attachment(s)   | ences Cited (PTO-892)  |   | 4) 🔲 Interview   | Summary (PTO-413)   |                |  |
| 2) 🔲 Notice of Drafts   | person's Patent Drawing Review (<br>closure Statement(s) (PTO-1449 o   |   | Paper No   | Summary (P10-413)<br>(s)/Mail Date<br>Informal Patent Application (PT0<br>                      | O-152)         |  |

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

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## **DETAILED ACTION**

1. Applicant amendment filed on 8/19/05 has been fully considered and made of record.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1-3, 5, 6, 8,18-20 and 22, 23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation recites: " surface of said substrates said through holes having a diameter in the range of about two diameters of a conductive sphere to about ten diameters of a conductive sphere" (see amended claims 1 and 18) is incorrect because the drawings and specification do not seem to describe the above claimed subject matters. At best the specification (page 9, lines 19-26) and related Fig. 4 discloses a bottom opening of the hopper 50/50A having the above configurations. Therefore, the newly amended subject mater such as "surface of said substrates said through holes having a diameter in the range of about two diameters of a conductive sphere to about ten diameters of a conductive sphere "is vague and indefinite.

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4. Claims 1-3, 6, 8, 18-20, 23 and 25, as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakemi et al in view of Yeh et al. This rejection is set forth in prior Office Action, paragraph 5.

5. Claims 5 and 22 as best understood are rejected under 35 U.S.C. 103(a) as obvious over Sakemi et al in view of Yeh et al. This rejection is set forth in prior Office Action, paragraph 6.

# Response to Arguments

- 6. Applicant's arguments filed on 8/19/05 have been fully considered but they are not persuasive.
  - a) First, the amendment to the claims raises issues of 112 (see above).
- b) Secondly, regarding to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either

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in the references themselves (i.e., see Fig. 4, and the discussion at col. 4 of Sakemi et al).

- c) Third, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., see amended subject matter of claims 1 and 18). Noting that the subject matter recited in these claims is not described in the specification and/or drawings (see 112 rejections above). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- d) Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

#### **Interviews After Final**

7. Applicants note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview in presented briefly, in writing (the agenda of the interview must be in writing). Such an interview may be granted if the examiner is convinced that disposal or clarification for appeal may be accomplished with only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations which would require more than nominal reconsideration or new search will be denied. See MPEP 714.13 and 713.09.

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It is noted that any amendment made to the disclosure and the claims. Applicant requires to point out the support provide numeral references to the claimed limitations as well as support in the disclosure (i.e., page and line numbers and reference number associated with from the drawings) for better clarity (See 37CFR 1.111 and section 2163.06 of the MPEP).

### Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mt

10/5/05

Minh Trinh

Primary Examiner